CLOSEOUT RECORD OF DECISION WEST CENTRAL PHOENIX WEST GRAND AVENUE WQARF REGISTRY SITE PHOENIX, ARIZONA

Arizona Department of Environmental Quality 1110 West Washington Street Phoenix, Arizona 85007



West Central Phoenix West Grand Avenue WQARF Registry Site Closeout Record of Decision

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Arizona Department of Environmental Quality

Waste Programs Division

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TABLE OF CONTENTS

ACR	ONY	MS	iii
1.0	DEC	CLARATION	1
	1.1 1.2 1.3 1.4	Site Name and Location Purpose Assessment of the Site Description of the Selected Remedy	1 1 1 1
2.0	DEC	CISION SUMMARY	2
	2.1 2.2 2.3 2.4	West Central Phoenix West Grand Avenue WQARF Registry Site Source Area Definition Chronology of Site Activities Potentially Responsible Party Investigation	3 4 6
3.0	SEL	ECTED REMEDY	6
	3.1 3.2	Achievement of Remedial Action Criteria Pursuant to A.R.S. §49-282.06 Compliance with Arizona Administrative Code	6 7
4.0	CON	NCLUSIONS	7
5.0	REF	ERENCES	8
		FIGURES	
Figure	: 1	Vicinity Map West Central Phoenix, West Grand Avenue WQARF Site, Phoenix, AZ	
Figure	2	Well Location Map West Central Phoenix, West Grand Avenue WQARF Site, Phoenix, AZ	
		TABLES	
Table	1	Summary of Selected Historical Contaminant-of-Concern Concentrations West Central Phoenix West Grand Avenue WQARF Site	
Table	2	Reporting and Community Involvement Activities West Central Phoenix West Grand Avenue WOARF Site	

	LIST OF ACRONYMS		
A.A.C.	Arizona Administrative Code		
ADEQ	Arizona Department of Environmental Quality		
ADHS	Arizona Department of Health Services		
ADWR	Arizona Department of Water Resources		
A.R.S.	Arizona Revised Statute		
AWQS	Aquifer Water Quality Standards		
BTEX	benzene, toluene, ethylbenzene, and xylenes		
CAB	Community Advisory Board		
CIP	Community Involvement Plan		
COC	Contaminant of Concern		
COP	City of Phoenix		
1,1-DCE	1,1-dichloroethene		
E&E	eligibility and evaluation		
EPA	Environmental Protection Agency		
ERA	Early Response Action		
FS	Feasibility Study		
GPLs	Groundwater Protection Levels		
Layke	Layke, Incorporated		
MCL	Maximum Contaminant Level		
NFA	No Further Action		
PCE	tetrachloroethene		
PRAP	Proposed Remedial Action Plan		
PRP	potentially responsible party		
RI	Remedial Investigation		
RO	Remedial Objective		
ROD	Record of Decision		
SRL	Soil Remediation Level		
SRP	Salt River Project		
SVE	soil vapor extraction		
TCE	trichloroethene		
μg/L	micrograms per liter		
URS	URS Corporation		
UST	underground storage tank		
VOC	volatile organic compound		
WCP	West Central Phoenix		
WGA	West Grand Avenue		
WQARF	Water Quality Assurance Revolving Fund		

1.0 DECLARATION

1.1 Site Name and Location

This Closeout Record of Decision (ROD) is for the West Central Phoenix (WCP) West Grand Avenue (WGA) Water Quality Assurance Revolving Fund (WQARF) Registry Site (the Site), located in Maricopa County, Phoenix, Arizona (Figure 1).

1.2 Purpose

Consistent with Arizona Administrative Code (A.A.C.) R18-16-410(B)(8), the Arizona Department of Environmental Quality (ADEQ) has reviewed the ROD and determined that site Remedial Objectives (ROs) have been met. This Closeout ROD demonstrates that the Site ROs for contaminants of concern (COCs) in groundwater have been achieved. The decision in this Closeout ROD is based upon previous activities and investigations conducted and performed at the Site.

1.3 Assessment of the Site

Several contaminants were detected in soil and groundwater samples collected during field investigations at the Site including tetrachloroethene (PCE), trichloroethene (TCE), and 1,1-dichloroethene (1,1-DCE). These compounds have been detected in soil samples collected at the Layke, Incorporated (Layke) facility, and/or in groundwater samples collected from wells at the Layke facility and the Site. The PCE and TCE contamination found in the soil beneath the Layke facility exceeded Soil Remediation Levels (SRLs) and minimum Groundwater Protection Levels (GPLs). Early Response Actions (ERAs) completed at the Site have addressed contamination in vadose zone soils. TCE is the only contaminant that was found at levels above its Aquifer Water Quality Standard (AWQS) of 5 micrograms per liter (µg/L) in the groundwater at the Site since initiating groundwater monitoring and sampling in 1992. PCE was never detected in groundwater samples collected from the Site groundwater monitoring wells above the method reporting limit since initiating groundwater monitoring and sampling in 1992. 1,1-DCE was never detected in groundwater samples collected from the Site groundwater monitoring wells above the AWOS of 7 µg/L since initiating groundwater monitoring and sampling in 1992.

ERAs including underground storage tank (UST) removal, soil excavation and soil vapor extraction (SVE) were conducted from 1990 to 1998. Following completion of the ERAs, TCE concentrations in groundwater steadily decreased. Since 2001, TCE concentrations have not exceeded the AWQS of 5 μ g/L.

1.4 Description of the Selected Remedy

The selected remedy for the Site documented by the ROD was groundwater monitoring and sampling for volatile organic compounds (VOCs) for two additional events to confirm that TCE concentrations remained less than the AWQS of 5 μ g/L. Provided that the TCE concentrations obtained during these two rounds met this criterion, all wells associated with the Site were to be abandoned in accordance with applicable Arizona Department of Water Resources (ADWR) requirements. Based upon the above actions, ADEQ has determined that no further remedial actions are necessary to protect human health and the environment and the Site will be delisted.

2.0 DECISION SUMMARY

The Site is located in Phoenix, Arizona, and consisted of the groundwater plume associated with a former UST located at the Layke facility (Figure 2). The Layke facility is located at 3330 West Osborn Road in Phoenix, Arizona. The Site was originally designated as part of the WCP Priority Site in 1987. Data obtained indicated three primary areas of VOC contamination, which were known as the "Main Plume Area," the "WCP North Plume Site," and the "Southeast Area." Subsequent investigations indicated that the "Main Plume Area" consisted of multiple separate plumes of contamination, including the WGA Site. The area surrounding the Site is predominantly comprised of mixed industrial and commercial properties with a low-density residential area located east of the Layke facility.

Historically, TCE concentrations greater than the AWQS of 5 μ g/L had been detected in wells WCP-4 and WCP-10 (Figure 2). Concentrations of TCE in well WCP-4 ranged from 420 μ g/L in May 1992 to below the laboratory detection limit starting in 1999 (Table 1). TCE concentrations in well WCP-10 ranged from 46 μ g/L in March 1995 to 5 μ g/L in June 2001. Monitoring well WCP-10 is located hydraulically downgradient from the Layke facility. Groundwater elevations in the area have since decreased leaving these two wells dry. Concentrations of 1,1-DCE in groundwater were detected in wells WCP-4 and WCP-10 below the AWQS of 7 μ g/L.

Subsequently, monitoring well WCP-235 was installed in May 2008 approximately 25 feet east of WCP-10 (Figure 2) (Locus Technologies, 2008). The TCE concentrations in groundwater samples collected from this well have ranged from 0.62 μ g/L to 2.1 μ g/L, which are less than the AWQS of 5 μ g/L (Table 1). No PCE or 1,1-DCE have been detected at concentrations above their respective reporting limits in groundwater samples collected from well WCP-235.

In January 2004, ADEQ completed the Remedial Investigation (RI) report (ADEQ, 2004) and in June 2013 the Feasibility Study (FS) report was completed (URS Corporation [URS], 2013) pursuant to Arizona Revised Statutes (A.R.S.) §49-287.03. The RI report:

- Established the nature and extent of the contamination and the sources thereof;
- Identified current and potential impacts to public health, welfare, and the environment;
- Identified current and reasonably foreseeable uses of land and waters of the state; and
- Obtained and evaluated information necessary for identification and comparison of alternative remedial actions.

The FS report used the information collected as part of the RI to:

- Identify a reference remedy and alternative remedies capable of achieving the ROs; and
- Evaluate remedies based on the comparison criteria to select a remedy that complies with A.R.S. §49-282.06.

ADEQ used the evaluation of remedial alternatives discussed in the FS report to choose a remedial method. ADEQ and URS (2014) then prepared the Proposed Remedial Action Plan (PRAP) dated February 2014 pursuant to A.R.S. §49-287.04 that included:

- A description of the chosen remedy;
- How the remedy would achieve each of the ROs identified in the RI report;
- How accomplishment of the ROs was to be measured; and
- A description of the use of the remediated water as defined in A.R.S. §49-287.01.

The 2016 ROD specified monitoring and sampling as the selected remedy. Based upon analytical data of groundwater samples collected at the Site since 2001, TCE concentrations have been effectively reduced to below the respective AWQS of 5 μ g/L. Results of the ROD selected remedy indicated that achievement of cleanup criteria had been met and that the Site meets the closure criteria and no further remedial actions are necessary to protect human health and the environment.

2.1 West Central Phoenix West Grand Avenue WQARF Registry Site

In 1982, the City of Phoenix detected VOCs in four municipal wells within the area of the WCP site. Groundwater sampling between 1982 and 1989 confirmed the presence of VOCs. During those investigations TCE was detected above the U.S. Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL). In 1987, the WCP WQARF Site was placed on the WQARF Priority List. Data indicated three primary areas of VOC contamination, which were known as the "Main Plume Area", the "WCP North Plume Site" and the "Southeast Area." Subsequent investigations indicated that the "Main Plume Area" consisted of several separate plumes of contamination, including the WGA Site. ADEQ established the WQARF Registry, replacing the Priority List, in 1997. In 1998, the WCP WQARF Site was divided into five WQARF Registry sites, one of which is the WGA Site.

The Site was placed on the WQARF Registry List on April 21, 1998, with an eligibility and evaluation (E&E) score of 17 out of a possible 120.

2.2 Source Area Definition

The Layke facility, located at 3330 West Osborn Road in Phoenix, Arizona was identified as the source of groundwater contamination at the Site. Field investigation activities were conducted between 1989 and 2002. The field activities included soil and soil-gas sampling, groundwater monitoring well installations, groundwater monitoring and sampling, and Hydropunch sampling. The distribution of contaminant concentrations in soil gas, soil, and groundwater that was identified during the RI indicated that the source of soil and groundwater contamination was the former UST located at the Layke facility. When the UST was removed in October 1990, it appeared structurally intact. However, evidence of leakage existed around the entrance to the tank and the tank cover, leading to the conclusion that the UST had overflowed at various times.

ERAs including UST removal, soil excavation and SVE were conducted from 1990 to 1998. Confirmation sampling at the source area indicated that COC concentrations were less than SRLs and minimum GPLs and ADEQ granted a No Further Action (NFA) status in 2002, pursuant to A.R.S. §49-287.01.

The former Site boundary had been defined by the areal extent of the former TCE groundwater plume, which was generally bounded by Osborn Road to the north, Earll Drive to the south, 33rd Avenue to the east, and 35th Avenue to the west. The Site is located in an urban commercial area.

Groundwater generally flows to the south-southwest at the Site. Groundwater pumping by a Salt River Project Agricultural Improvement and Power District (SRP) well located approximately 900 feet east of the Site significantly influences groundwater flow and can cause groundwater flow to shift to an easterly direction. Groundwater recharge from the SRP Grand Canal located along the northern edge of the Site previously had a significant effect on groundwater flow. The Grand Canal's influence on groundwater flow has been reduced since the canal has been lined. Groundwater levels have subsequently declined by as much as 30 feet.

Groundwater TCE concentrations greater than the AWQS of 5 μ g/L have been detected in wells WCP-4 and WCP-10. Concentrations of TCE in WCP-4 ranged from 420 μ g/L in May 1992 to below the laboratory detection limit starting in 1999 (Table 1). TCE concentrations in well WCP-10 ranged from 46 μ g/L in March 1995 to 5 μ g/L in June 2001. Monitoring well WCP-10 was located hydraulically downgradient from the Layke facility. Groundwater elevation in the area has since decreased leaving these two wells dry. Concentrations of 1,1-DCE in groundwater were detected in wells WCP-4 and WCP-10 below the AWQS of 7 μ g/L.

Subsequently, monitoring well WCP-235 was installed in May 2008 approximately 25 feet east of WCP-10. The TCE concentrations in groundwater samples collected from this well have ranged from 0.62 μ g/L to 2.1 μ g/L, which are less than the AWQS of 5 μ g/L (Table 1). No PCE or 1,1-DCE were detected at concentrations above their respective laboratory reporting limits. A map depicting the well locations is provided as Figure 2.

2.3 Chronology of Site Activities

The detailed history of Site investigations and ERAs completed at the Site was summarized in the RI (ADEQ, 2004) and the FS (URS, 2013) reports. The following provides brief summaries of the main events and investigative/ERA milestones for the Site:

- 1982: The City of Phoenix (COP) detected TCE in four municipal public supply wells, including COP wells #70, #71, #151, and #152. Since the TCE concentrations exceeded the EPA MCL of 5 μg/L in COP wells #70 and #71, these two wells were immediately shut down. These wells are located cross-gradient to the Layke facility.
- 1983 1989: The Arizona Department of Health Services (ADHS), Salt River Project, and the COP confirmed the presence of VOCs in the groundwater with sampling in 1983, 1985, and 1986. COP wells #151 and #152 were taken off-line on March 7, 1989. ADHS also identified dissolved-phase VOCs in the on-site West Osborn Complex Irrigation Well (Pincus Well).
- 1987: The WCP area was designated a Priority List site.

- 1989 2002: Field investigation activities at the Site were conducted. The investigation indicated that the source of soil and groundwater contamination at the Site is the Layke facility.
- 1990 1998: An ERA was conducted by Layke, the current operator at the Layke facility. In 1990, Layke excavated a waste oil UST that also contained solvents and was the source of surrounding TCE soil contamination. Soil samples and a sludge sample from the tank were collected and analyzed for VOCs and benzene, toluene, ethylbenzene, and xylenes (BTEX). Analytical results indicated the presence of TCE, PCE, and low levels of BTEX in the underlying soils. The sludge contained TCE, 1,1-DCE, PCE, and low levels of BTEX. Additional soil borings were installed and sampled ranging from 10 to 90 feet below ground surface with TCE, PCE, and BTEX detected at various depths. A SVE remediation system was installed and operated from March 1995 to June 1998.
- 1999 2002: Between 2001 and 2002, soil samples were collected by ADEQ in the vicinity of the UST to determine the effectiveness of the SVE system in remediating the soils. The soil data indicated that the contamination had been effectively remediated by the SVE system. Based on these data, ADEQ granted a NFA request in December 2002, pursuant to A.R.S. §49-287.01.
- 2004: ADEQ received a request from Layke in April to permanently shut down the SVE system. ADEQ granted the request in a letter dated April 21, 2004. The Draft RI Report was issued for public comment to meet the requirements under A.R.S. § 49-287.03 and A.A.C. § 18-16-406. No comments were received during the 30-day comment period. Since no comments were received on the Draft RI Report, the report was accepted as the Final RI Report for the Site.
- 2005: ADEQ issued the Proposed Remedial Objectives Report for public comment to meet the requirements established under A.A.C. R18-16-406. No comments were received during the 30-day comment period.
- 2008: A new groundwater monitoring well, WCP-235, was installed and sampled.
- 2012 2013: Groundwater monitoring and sampling was conducted.
- 2013: The ADEQ published the public notice of the FS Work Plan availability to meet the requirements under A.A.C. R18-16-407. The ADEQ received one comment letter and believed the comments in the letter were addressed in the FS Report. The ADEQ completed the Final FS Report in accordance with A.A.C. R18-16-407.
- 2014 2015: Groundwater monitoring and sampling were conducted at the Site.
- 2016: The PRAP for the Site was issued for public comment on January 21, 2016. ADEQ issued the public notice for the Final ROD on June 16, 2016.

2.4 Potentially Responsible Party Investigation

Pursuant to A.R.S. § 49-283(A), a potentially responsible party (PRP) search was conducted. The PRP Investigation Report identified the source of the contamination as the Layke facility, located at 3330 West Osborn Road in Phoenix, Arizona. A UST was periodically overfilled, causing leaks between the lid and main body of the tank. However, the date and quantity of releases from the UST is not known. On September 24, 1990, ADEQ issued letters to Aldo W. and Doris Canfield, the property owners, and to Mr. Apodaca, Layke's president, providing notice to undertake remedial action at the Layke facility because of the releases of hazardous substances.

3.0 SELECTED REMEDY

The Final Feasibility Study for West Central Phoenix, West Grand Avenue WQARF Site (URS, 2013) provided the evaluation of three Alternative Remedies and the reference remedy was carried forward as the selected remedy to the PRAP (URS, 2014).

The remedial strategy and measures of the selected remedy included two additional groundwater monitoring and sampling events (ADEQ & URS, 2016). During each sampling event, the depth to groundwater was measured at wells WCP-10 and WCP-235. A groundwater sample and corresponding duplicate were collected from well WCP-235 following low-flow purging of the well. In addition, each sampling event included collection of an equipment blank sample. The groundwater samples were submitted to an ADHS licensed laboratory for analysis of VOCs in accordance with EPA Method SW-846 8260B. Monitoring results were reported at the conclusion of the two sampling events. A map depicting the groundwater monitoring well locations is included on Figure 2.

Based on the results of the two sampling events, the TCE concentrations remained less than the AWQS of 5 μ g/L and all other constituents were less than their respective laboratory reporting limits with the exception of chloroform which was detected at a concentration less than its AWQS (URS, 2016a). Following determination that TCE concentrations continued to be less than the AWQS, all wells associated with the Site were abandoned in accordance with the applicable ADWR requirements promulgated in A.A.C. R12-15-816 (URS, 2016b). A "Notice of Intent to Abandon a Well" was filed with the ADWR and a Well Abandonment Completion Report was filed within 30 days of completion of abandonment activities.

3.1 Achievement of Remedial Action Criteria Pursuant to A.R.S. §49-282.06

Two additional rounds of groundwater monitoring and sampling were selected as the reference remedy for the Site. The reference remedy:

- Adequately assured the protection of public health and welfare and the environment;
- Provided for the control, management and cleanup of the TCE contamination, maximizing beneficial use of the groundwater; and
- Was reasonable, necessary, cost-effective and technically feasible.

Following completion of the ERAs, TCE concentrations in the groundwater steadily declined. TCE has not been detected in groundwater samples at concentrations greater than the AWQS of $5 \mu g/L$ since June 2001. The data presented on Table 1 show that the ROs for groundwater have been met. Therefore, the Site meets the closure criteria and qualifies to be delisted from the WQARF Registry.

3.2 Compliance with Arizona Administrative Code

ADEQ complied with the A.A.C. with respect to reporting, community involvement, and public comment requirements for the Site. In addition, the community has been kept advised of investigative and cleanup activities through presentations by ADEQ at the Community Advisory Board (CAB) meetings and in various public notices. The activities and time periods for the community involvement requirements are listed in Table 2.

4.0 CONCLUSIONS

The remedial strategy chosen for the selected remedy was monitoring and sampling of groundwater. The remedy has achieved its goal as concentrations of COCs are below applicable AWQSs in groundwater. Concentrations of the COCs have not exceeded AWQS in Site monitoring wells since 2001. As the remedy detailed in the 2016 ROD has been met, as demonstrated by the analytical results of groundwater samples collected from the monitoring wells at the Site, no further remedial action is necessary and the site can be removed from the WQARF Registry.

The following are the final actions completed by ADEQ to proceed with Site delisting as required in the 2016 ROD:

- Discontinuation of monitoring and sampling of ADEQ groundwater monitor wells; and
- Abandonment of ADEQ monitor wells according to the ADWR well abandonment rule set forth in A.A.C. R12-15-816.

5.0 REFERENCES

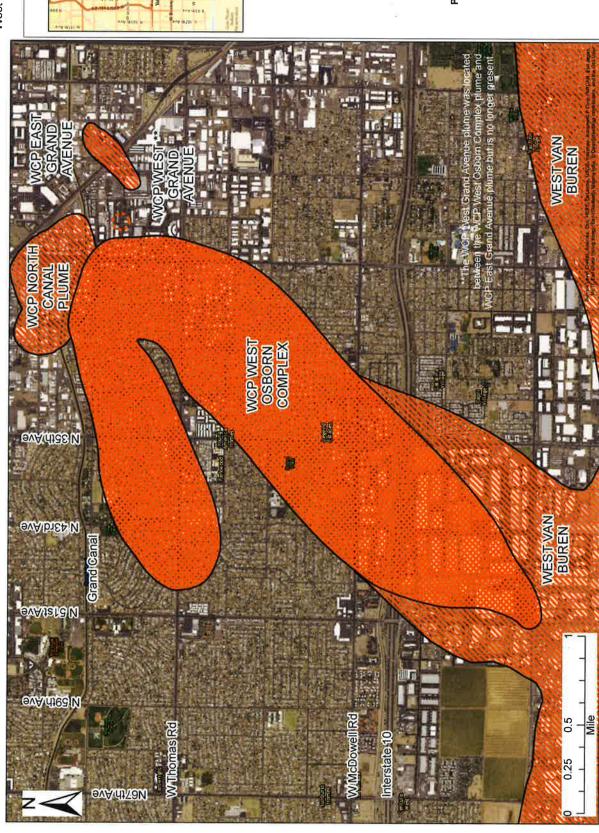
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- ADEQ & URS, 2014. Final Proposed Remedial Action Plan for the West Central Phoenix West Grand Avenue WQARF Site Phoenix, Arizona. URS. February.
- ADEQ & URS, 2016. Record of Decision, West Central Phoenix West Grand Avenue WQARF Site, Phoenix, Arizona. URS. May.
- Locus Technologies, 2008. Summary of Well Installation Activities, ADEQ Layke/ West Central Phoenix Water Quality Assurance Revolving Fund (WQARF) Area. October.
- URS, 2013. Final Feasibility Study for West Central Phoenix, West Grand Avenue WQARF Site. URS. June.
- URS, 2014. Final Proposed Remedial Action Plan for the West Central Phoenix West Grand Avenue WQARF Site Phoenix, Arizona. Arizona Department of Environmental Quality. February.
- URS, 2016a. Groundwater Monitoring Report, West Grand Avenue WQARF Site, Phoenix, Arizona. URS. June.
- URS, 2016b. Completion of Well Abandonment at West Grand Avenue. URS. June.

FIGURES

a

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West Grand Avenue WQARF Site Figure 1 Vicinity Map West Central Phoenix Phoenix, AZ



2.25 4.5 Miles





WQARF

Counties

Plume Data Update: 2016-11-01

Plume boundaries depicted on the site map represent ADEO's interpretation of data available at the time the map was constructed. The map is intended to provide the back of the map is to the estimated gatepapine extent of from contamination as of the date of map production. The actual extent of contamination may be defined in the actual extent of contamination may be definered. The principle, the plume of the site are different interfers, the plume of the site may draing in the flure as new information becomes available.



S/gisdev/dc7/WQARF/WestOsbornComplex2016.mxd

Arizona Department of Environmental Quality URS 0 W Wedde W Clarendon Ave OVA 181 CM W Osborn Rd 10.5E-07.5N W.Edgemont Ave—e DW 9vA bice M W Windsor Ave WCP-4 W Roanoke Ave WCP-8 W Whilton Ave W.Catalina'Dr WCP-11 Earli Dr 10 Alk W Osborn Rd W Monterey Way N3Gth Ave. BVA HISE N и зепу. DVA MYE N W Mulberry.Dr. -W.Verde Lin W Clarendon A W FIDWER S. W Catalina O' W AIBE N COPARO DE NEWS W Cheery Lynn Rg W Mitchell Dr W Crittenden Ln -W Earli Dr avA diagN W Whitton Ave 10 418 E N COP-71-6 W Egemont Ave $W \in \operatorname{art} D_I$ 401 HOP N 2 " 410 N UTT AVE Ave

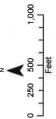
Figure 2 Well Location Map West Central Phoenix West Grand Avenue WQARF Site

Phoenix, AZ

- Groundwater Monitoring Well
- City of Phoenix Water Supply Well
- Salt River Project Irrigation Well Michigan Trailer Park Well
- Danone Well
- Canal

West Grand Avenue Layke Facility

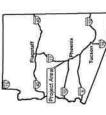




1 inch = 600 feet

Source:
Map Feetures: ADOT 2014, ADEQ 2012, URS 2013
Map Feetures: ADOT 2014, ADEQ 2012, URS 2013
Base Map: Exi, DeLarme, MAVTEC, ToniTon, Intermap,
increment P Corp., EGECQ, USSS, FAO, NPS, NPCAM, GeoBase, IGN,
increment P Corp., EGECQ, USSS, FAO, NPS, NPCAM, GeoBase, IGN,
and the GIS User Community.

Coordinate System: NAD 1983 StatePlane Arizona Central FIPS 0202 Feet Intil







TABLES

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Table 1 Summary of Selected Historical Contaminant-of-Concern Concentrations West Central Phoenix West Grand Avenue WQARF Site

		TCE	1,1-DCE	PCE
Well	Date	(μg/L)	(μg/L)	(μg/L)
WCP-4	05/29/92	420	<1.0	<1.0
	07/10/92	340	2	<0.5
	07/10/92	290	1.5	<0.5
	12/04/92	370	1.6	<0.5
	01/24/94	380	<5.0	<5.0
	03/28/95	140	<0.5	<0.5
Α	02/07/96	190	< 0.5	<0.5
	11/25/96	2.0	< 0.50	< 0.50
	11/25/96	3.1	< 0.5	<0.5
	05/06/97	< 0.50	< 0.50	< 0.50
161	08/09/97	0.58	< 0.50	< 0.50
	11/14/97	0.76	< 0.50	< 0.50
	02/10/98	1.4	< 0.50	< 0.50
	05/26/98	< 0.50	< 0.50	< 0.50
	08/28/98	2.7	< 0.50	< 0.50
	11/09/98	0.85	< 0.50	< 0.50
	02/11/99	< 0.50	< 0.50	< 0.50
	03/05/01	< 0.3	< 0.3	< 0.3
	03/05/01	< 0.3	< 0.3	< 0.3
	06/06/01	<0.5	< 0.5	< 0.5
WCP-8	12/04/92	< 0.5	<0.5	< 0.5
	02/18/93	< 0.5	<0.5	< 0.5
	01/20/94	< 0.5	< 0.5	< 0.5
	02/08/96	< 0.5	< 0.5	< 0.5
	11/25/96	< 0.50	< 0.50	< 0.50
	11/25/96	< 0.5	<0.5	< 0.5
	05/09/97	< 0.50	< 0.50	< 0.50
	08/09/97	< 0.50	< 0.50	< 0.50
	11/13/97	< 0.50	< 0.50	< 0.50
	02/12/98	< 0.50	< 0.50	< 0.50
	05/20/98	< 0.50	< 0.50	< 0.50
	08/21/98	< 0.50	< 0.50	< 0.50
	11/06/98	< 0.50	< 0.50	< 0.50
	02/19/99	< 0.50	< 0.50	< 0.50
	06/06/01	DRY	DRY .	DRY
WCP-10	02/28/95	37	1.0	< 0.5
	03/28/95	46	1.0	<0.5
	03/28/95	45	0.9	<0.5
	02/06/96	33	<0.5	<0.5
	11/22/96	16	<0.50	<0.50
	11/22/96	20	0.5	<0.5
	05/08/97	20	<0.50	<0.50
	09/04/97	19	<0.50	<0.50
	11/14/97	29	<1.0	<1.0
	02/10/98	11	<0.50	<0.50
	05/18/98	3.9	<0.50	<0.50
	08/20/98	5.9	<0.50	<0.50
	11/05/98	11	<0.50	<0.50
	02/08/99	13	<0.50	<0.50
	03/05/01	8	<0.3	<0.3

Table 1 Summary of Selected Historical Contaminant-of-Concern Concentrations
West Central Phoenix West Grand Avenue WQARF Site

		TCE	1,1-DCE	PCE
Well	Date	(μg/L)	(μg/L)	(μg/L)
	06/07/01	5	<0.5	<0.5
	10/10/12	DRY	DRY	DRY
	01/16/13	DRY	DRY	DRY
	12/03/14	DRY	DRY	DRY
	03/17/15	DRY	DRY	DRY
	04/20/15	DRY	DRY	DRY
	01/29/16	DRY	DRY	DRY
	04/12/16	DRY	DRY	DRY
WCP-11	02/28/95	< 0.5	< 0.5	< 0.5
	02/28/95	< 0.5	< 0.5	< 0.5
	03/28/95	< 0.5	< 0.5	< 0.5
	02/07/96	< 0.5	< 0.5	< 0.5
	11/22/96	< 0.50	< 0.50	< 0.50
	11/22/96	0.6	< 0.5	< 0.5
	05/06/97	< 0.50	< 0.50	< 0.50
	08/05/97	1.5	< 0.50	< 0.50
i - 2	11/14/97	2.1	< 0.50	< 0.50
	02/12/98	3.8	< 0.50	< 0.50
	05/18/98	2.7	< 0.50	< 0.50
	08/21/98	0.93	< 0.50	< 0.50
	11/09/98	0.70	< 0.50	< 0.50
	02/09/99	1.3	< 0.50	< 0.50
	06/06/01	DRY	DRY	DRY
WCP-235	06/06/08	2.1	< 0.50	< 0.50
	10/10/12	<1.0	<1.0	<2.0
	10/10/12	<1.0	<1.0	<2.0
	01/16/13	1.0	<1.0	<2.0
	01/16/13	1.0	<1.0	<2.0
	12/03/14	<2.0	<2.0	< 5.0
	12/03/14	<2.0	<2.0	< 5.0
	03/17/15	1.1	< 0.50	< 0.50
	04/20/15	0.75	< 0.50	< 0.50
	04/20/15	0.77	< 0.50	< 0.50
	01/29/16	0.87	< 0.50	< 0.50
	01/29/16	0.83	< 0.50	< 0.50
	04/12/16	0.62E	<2.0	<5.0
	04/12/16	0.63E	<2.0	<5.0

NOTES:

TCE = Trichloroethene

PCE = Tetrachloroethene

1,1-DCE = 1,1-Dichloroethene

 $\mu g/L = micrograms per liter$

Concentrations in bold are greater than the Aquifer

Water Quality Standard (AWQS).

E = Concentration estimated. Analyte was detected below laboratory minimum reporting level (MRL) but above the method detection limit (MDL).

Table 2
Reporting and Community Involvement Activities
West Central Phoenix West Grand Avenue WQARF Registry Site

Community Involvement Activities	Regulatory Citation/Rule	Date
Establish Community Involvement Area	A.R.S. § 49-289.02(A)	April/May1998
Notice of the Site listing on the Registry	A.R.S. § 49-287.01 A.R.S. § 49-289.03(A)	April 1998
Hazardous substance contamination notice and fact sheet	A.R.S. § 49-289.02(B) A.R.S. § 49-287.03(B) A.A.C. R18-16-404(C)(1)(i)	April 2000
Community Involvement Plan (CIP)	A.R.S. § 49-287.03(D) A.R.S. § 49-289.03(C) A.A.C. R18-16-403(E) A.A.C. R18-16-404(C)	June 2000
Establish CAB selection committee	A.R.S. § 49-289.03(D)	April 2000
Establish CAB	A.R.S. § 49-289.03(C) A.R.S. § 49-289.03(F)(1)	June 2000
Notice of RI scope of work, fact sheet, and outline of CIP	A.R.S. § 49-287.03(B) A.R.S. § 49-287.03(C) A.A.C. R18-16-403(F) A.A.C. R18-16-403(G)	1998
Establish information repository	A.R.S. § 49-289.03(B)	2000
Questionnaires mailed for draft Land and Water Use Study	A.A.C. R18-16-404	March, April, and June 2001
Notice of opportunity to comment on draft RI report	A.A.C. R18-16-404(C)(1)(b) A.A.C. R18-16-406(F)	February 2004
Public meeting to establish ROs	A.A.C. R18-16-404(C)(1)(b) A.A.C. R18-16-406(I)(1)	March 2004
Notice of opportunity to comment on proposed RO report and availability of final RO report	A.A.C. R18-16-404(C)(1)(c) A.A.C. R18-16-406(I)(5)	October 2005
Public meeting(s) to discuss proposed/revised RO report if needed	A.A.C. R18-16-406(I)(5)	NA
Notice of availability of final RI report	A.A.C. R18-16-406	2004
Notice of availability of the FS work plan	A.A.C. R18-16-404(C)(1)(d)	April 2013
Re-Establish CAB selection committee	A.R.S. § 49-289.03(D)	August 2014
Re-Establish CAB	A.R.S. § 49-289.03(C) A.R.S. § 49-289.03(F)(1)	October 2014
Issue notice of availability and opportunity to comment on the PRAP	A.R.S. § 49-287.04(B) A.A.C. R18-16-404(C)(1)(e)	January 2016
Notice of ROD & Responsiveness Summary Availability	A.R.S. § 49-287.04 (G) A.A.C. R18-16-404(C)(1)(f)	June 2016